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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,409	12/11/2003	Phillip J. Gilmore	RAP04 P-647A	1408

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VAN DYKE, GARDNER, LINN AND BURKHART, LLP
2851 CHARLEVOIX DRIVE, S.E.
P.O. BOX 888695
GRAND RAPIDS, MI 49588-8695

EXAMINER
DEUBLE, MARK A

ART UNIT	PAPER NUMBER
3651	

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,409	GILMORE ET AL.	
	Examiner	Art Unit	
	Mark A. Deuble	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,10,12-17,22-40,42,43 and 46-59* is/are pending in the application.

4a) Of the above claim(s) *22-39* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 10,12-13,40,42,43 and 46-59* is/are rejected.

7)☒ Claim(s) *4-8,14-17 and 22-27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claim 28-39 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 9, 2005.

In response to applicant's request to consider claims 28-39, it is noted that these claims depend from claim 40 which is under consideration. However, this does not mean that these claims should be considered because they are directed to a nonelected *species* and claim 40 is not an allowable generic or linking claim.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 48 and 59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 49 and 58 include the terms "upstream" and "downstream" which are a relative terms which render the claim indefinite. The terms upstream and downstream have no meaning in the absence of a direction of conveyor operation. Furthermore, because the conveyor operates bi-directionally, the direction defined by the terms upstream and downstream change with the direction of conveyance. This renders the scope of the claims impossible to ascertain. It is recommended that the terms upstream and downstream be defined relative to the base of the conveyor or be replaced with other directional terminology.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 10, 40, 42-43, and 46-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilmore et al. '893.

Gilmore et al. '893 shows an extendable conveyor with a support structure 26 an extendable section 23 supported in cantilever fashion by the support structure, a plurality of booms 24 forming the extendable section that are extendable between a fully retracted position and a fully extended position, a conveyor belt 28reeved among the booms to define a conveying surface, a drive formed by a motor (not shown) that is operated to drive the conveyor belt in forward and reverse directions, and an operator panel 21 at an outer end portion of the extendable section that includes an input device that controls the extension and retraction of the extendable section. The support structure is mounted at the same general elevation as a support surface for a trailer into which the extendable section extends with an upward inclination so that an end portion of the extendable section opposite the support structure may be at an operator waist-high elevation. While Gilmore et al. '893 does not show the details of the extendable section of the conveyor, it states in column 4, lines 43-44, that the details are disclosed in U.S. Patent No. 5,351,809 (hereinafter Gilmore et al. '809). Gilmore et al. '809 shows that the booms are made from unitary sheet metal pieces 30 that form a horizontal belt supporting surface forming a substantial part of each boom. Each boom also includes support sides 78 extending

downwardly from the belt supporting surface. Each of the sides includes a generally horizontal track surface 86 fixed at inwardly turned portions 88 of their bottom edges. These tracks are supported by cam followers 80 mounted on adjacent booms so that the outer booms are supported by their nearest inner boom in a fashion that allows the booms to nest within each other when fully retracted. As can be seen in Fig. 6 of Gilmore '809, horizontal beams extend along the bottom of each boom between the support sides. While it is unclear if these beams completely enclose the bottom sides of the booms, they may still be viewed as forming guards extending between portions of the support sides opposite the belt supporting surface because they would at least partially guard the bottom sides of the booms. Thus Gilmore et al. '893 and '809 show all the structure required by claims 40, 42, 46-48, 50-52, 54-57 and 59 except for the at least one boom made from a unitary sheet of metal forming a three-dimensional shape defining a horizontal belt supporting surface and support sides extending from the belt supporting surface as required the added limitation of claims 40 and 51.

In regard to this added limitation, it should be noted that forming the boom as one integral piece rather than as several pieces rigidly joined together is deemed to have been an obvious design choice. See In re Larson, 340 F.2d 965, 144 USPQ 347, 349 (CCPA 1965) (A claim to a fluid transporting vehicle was rejected as obvious over a prior art reference which differed from the prior art in claiming a brake drum integral with a clamping means, whereas the brake disc and clamp of the prior art comprise several parts rigidly secured together as a single unit. The court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.").

Additionally applicant added a limitation to claim 40, that the at least one boom define a pair of horizontal flanges extending inwardly from the support sides to define an opening between the flanges, and added a limitation to claim 51, that the support sides of the at least one boom is formed with horizontally offset portions to define generally horizontal track surfaces. It is appreciated that these added limitations further define the shape of the boom, however, these limitations do not define the shape of the boom narrowly enough to distinguish the present invention from Gilmore et al. When the booms disclosed by Gilmore et al. are made integrally of a unitary sheet of metal, the inwardly turned portions 88 of the support sides 78 to which the track surfaces 86 are attached form horizontal flanges extending inwardly from the support sides with an opening defined therebetween as required by claim 40. Furthermore, the track surfaces 86 form offset portions on the support sides as required by claim 51. It is recognized that these offset portions are not the same shape as those illustrated in the Figs. of the present application, however, they may still be viewed as forming offset portions when the term is given its broadest reasonable interpretation such as the definition in Merriam Webster's Collegiate Dictionary: 10th Edition which defines an offset broadly as "an abrupt bend in an object by which one part is turned aside out of line."

Applicant argues that because the forces placed on the booms can be extensive and the stress placed upon the individual sections can be enormous so that it would not have been obvious to one of ordinary skill in the art at the time of the invention to form the boom of a unitary sheet of metal as required by the claims. This argument is not persuasive. The stresses placed on the booms would in fact suggest to one of ordinary skill in the art that the booms need to be quite strong. One way of achieving this strength is by forming the booms with a solid one

piece construction as would be apparent to any ordinary mechanic and certainly apparent to one of ordinary skill in the art of extendable conveyors. Furthermore, this argument defies the holding of In re Larson discussed above and is therefore not persuasive.

Applicant also argues that this rejection should be withdrawn because the members 30 define a carriage assembly and not a boom. This argument is not persuasive. Gilmore et al. refers to the members 30 as upper support surfaces that are part of the extendable units 22-25. These extendable units are the booms required by the present invention. The fact that they are not referred to as booms is irrelevant as they serve the same function as the booms of the present invention.

Finally, Applicant argues that there are further distinctions that are clearly not disclosed, taught or suggested. However, this argument is not persuasive because it amounts to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

6. Claims 1, 3, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilmore et al. '893 in view of Greasley (U.S Patent No. 3,826,353).

Gilmore shows generally that is required by the claims except for the electromechanical actuator and control required by claims 1 and for the friction device required by claim 13. However, Greasley shows a conveyor with an extendable section with an extendable boom 22 that is extended and retracted relative to a boom 19 by employing an electromechanical operator 50 that operates to impede movement of the belt with respect to the extendable section. A control extends the extendable section by controlling a drive to operate a conveyor belt 26 in one direction while controlling the electromechanical operator to impede movement of the conveyor

belt with respect to the extendable section and it retracts the section by operating the electromechanical operator in the same fashion when the belt is driven in the opposite direction. The control deactivates the electromechanical operator while activating the conveyor belt drive to convey articles. Relative movement between the two booms during conveying is prevented by a brake assembly 41 between the two booms. This system advantageously allows the extendable section of the conveyor to be extended and retracted without a separate drive assembly for extending and retracting the boom. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the booms of Gilmore et al. with brakes therebetween and with a control and electromechanical actuator in the fashion taught by Greasley. When this is done the resulting apparatus would have all the structure required by claims 1, 3, and 12-13.

Allowable Subject Matter

7. Claims 4-8, 14-17, and 22-27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER